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EDITORIAL

Sound in the Air

Can you remember your old schooldays? For some reason, we remember the old good days as being especially beautiful. All the shrubs on campus were in blossom and the trees were green. The grass was dotted with dandelions. Everyone was happy and carefree, for the vacation was just about to begin. With that to look forward to, no-one was worried about the future.

But life is too complicated for you to dwell on old, faded memories. The editorial office of Osong Public Health and Research Perspectives (PHRP) sits on a hill in Osong Techonopolis, facing the beautiful hillside. The view allows us to enjoy the colorful changes of the hill with the seasons. It is both amazing and sad to watch a roe deer jumping around the fence when a sudden aircraft noise breaks the peace of the hillside.

Recent research has reported that aircraft noise is associated with several health issues such as hearing loss, a poor quality of life, an increased risk of cardiovascular disease, hypertension, annoyance, and psychiatric disorders [1–4]. Prolonged exposure to an environmental stressor such as aircraft noise may affect sleep, leading to a poor sleep quality [5], which has secondary effects such as excessive daytime fatigue, low work capacity, and an increased accident rate [5]. Exposure to noise is also associated with negative emotions such as depression, anxiety, and stress [6].

A paper in this issue of PHRP reports an investigation of the impact of aircraft noise. A study was carried out on the impact of aircraft noise on the quality of life of nearby residents, including their sleep patterns and mental state [7]. The study selected villages near a military airbase in the southwestern province of Korea and measured the relationship between aircraft noise and sleep quality. The residents experienced statistically significant sleep disturbance compared with a reference group ($p < 0.001$). The study also measured the exposure–response relationship between the degree of aircraft noise and sleep quality. Among the participants with a normal mental status, the prevalence of sleep disturbance was 2.61- and 3.52-fold higher in the low exposure group and high exposure group, respectively, than in the control group.

We would like to see a follow-up study on the impact of aircraft noise in Korea on sleep disorders and mental health based on a long-term cohort study.

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